**Science in a Bag – Teacher Page**

**Plant Structures and Animals**

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**Grade Level-** 1st Grade

**Standards**

GLE 0107.1.2 Use tools to examine major body parts and plant structures.

0107.1.1 Combine pictures of major body parts to assemble a complete animal.

0107.1.2 Communicate the effects of using tools like magnifiers when examining different body parts.

0107.1.3 Make diagrams to record and communicate observations.

**Task Objective**

The student will be able to put parts of a picture together to make a complete picture of an animal. Students will also be able to use a microscope to look at parts of a leaf and human hair to identify major body parts and plant structures. They will be able to compare and contrast with and without the tool to see what differences they observed.

**Explanation**

* This activity is to show that body parts and plant structures are all around us. Tools, such as microscopes, play a tremendous role in our everyday life. Students should be able to compare and contrast two different items and draw a picture of the differences between the two. Students will be able to use context clues to match up pictures with definitions in the card sort activity.
* Students should complete the venn diagram by drawing what they see of the leaf with and without a microscope. This will be placed in the interactive notebook after completion.

**Academic Vocabulary**

Alike- object is the same

Different- not the same

Green- most plants are this color

Plants- this is usually a flower, leaf, plant, root, or seed

Tool- instrument used to make really small objects look bigger by magnifying them.

* The #4 Vocabulary Card Sort will be used as a (FACT) Formative Assessment Classroom Technique for this activity. The student will use context clues from the vocabulary card sort to match up the sentence strips to the picture/word. This will help students to be able to see what each word means in picture form.

**Common Misconceptions**

* All plants have the same shape of leaf.
* Plants have the same texture.
* Plant get what they need to grow only through their roots.
* Plants are not alive.
* Only leaves take in water.
* Plants get their energy from the soil through roots.

**Real World Connection**

Students will be able to think of other items that they would want to look at under a microscope. They could also bring in their own plant leaf to see what it looks like under the microscope. Students will be able to relate microscopes to magnifying glasses in the real world.

**Connections Across the Curriculum**

Language Arts

* CCSS.ELA-LITERACY.L.1.4

Determine or clarify the meaning of unknown and multiple meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies.

* Students could use context clues to find out the meaning of new vocabulary within the lesson.

Math

* CCSS.Math.1.OA.5

Relate counting to addition and subtraction.

* The students could count the number of legs they bear has.

Language Arts

* CCSS.ELA-LITERACY.W.1.8

With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

* In literacy, teaches could have the students write about the microscope experience with the leaf and talk about new experiences they learned about.

**References**

The common misconceptions come from this website

* <http://beyondpenguins.ehe.osu.edu/issue/polar-plants/common-misconceptions-about-plants>

Graphic organizer

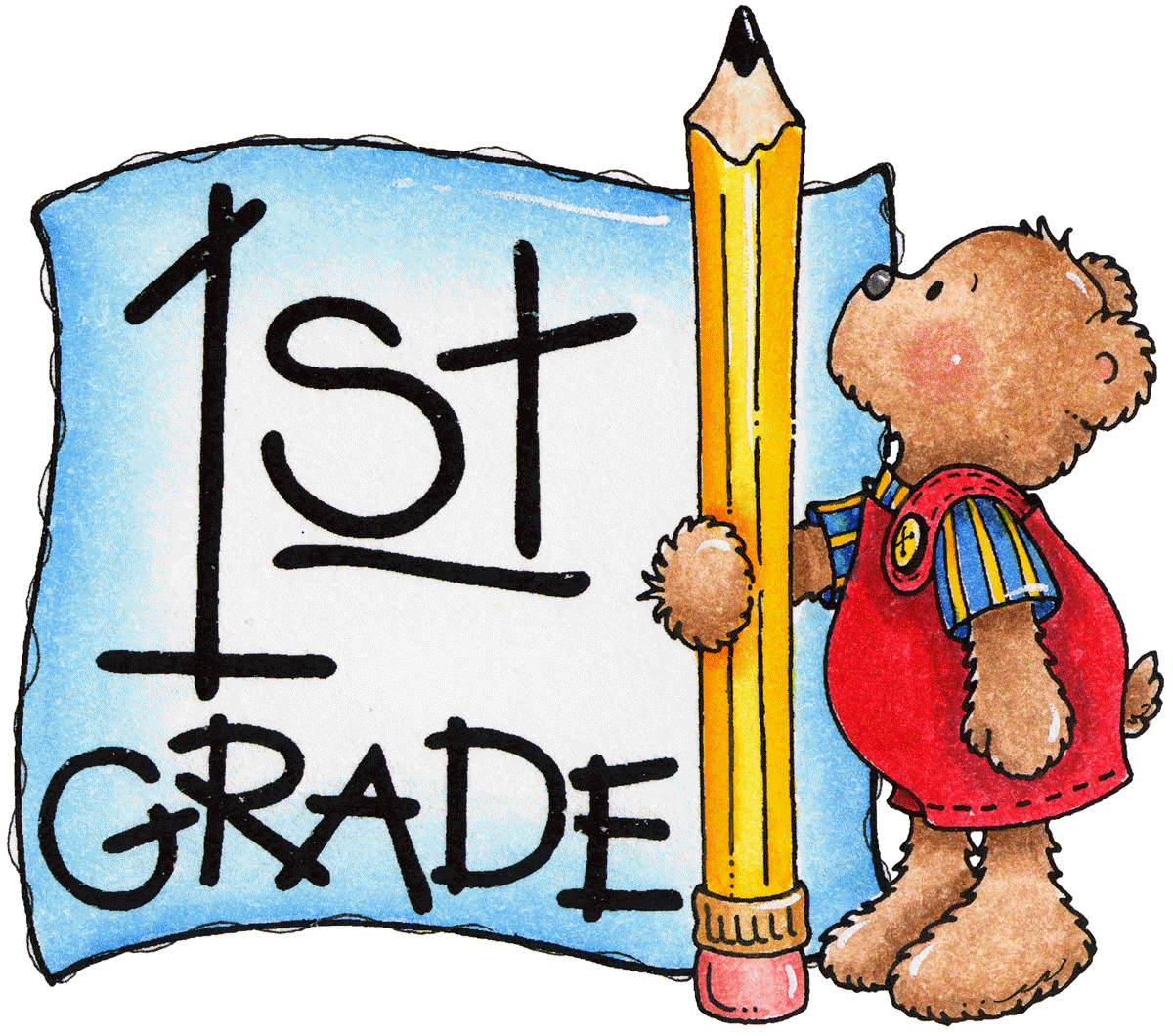
* <http://www.readwritethink.org/classroom-resources/printouts/venn-diagram-circles-c-30196.html>

Pictures of the bears come from this website

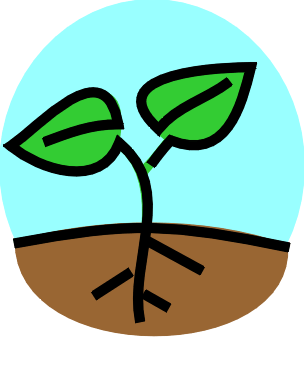
* <http://animals.nationalgeographic.com/animals/photos/bears/#/polar-bear-sleeping_666_600x450.jpg>

FACT Ideas

* <http://www.uncoveringstudentideas.org/books/facts>

**Science in a Bag – Student Page**  

**Plant Structures and Animals**



**Grade Level** - First Grade

**Standards**

GLE 0107.1.2 Use tools to examine major body parts and plant structures.

0107.1.1 Combine pictures of major body parts to assemble a complete animal.

0107.1.2 Communicate the effects of using tools like magnifiers when examining different body parts.

0107.1.3 Make diagrams to record and communicate observations.

**Task Objective**

The student will be able to put parts of a picture together to make a complete picture of an animal. Students will also be able to use a microscope to look at parts of a leaf and human hair to identify major body parts and plant structures. They will be able to compare and contrast with and without the tool to see what differences they observed.

**Materials Needed**

Pencil

Venn diagram sheet for compare/contrast with and without microscope

Vocabulary Match Up Cards

Picture of bear (cut into squares for students to puzzle together)

Microscope

Leaf

Tape

Interactive Journal

**Procedures**

Write your name on your venn diagram sheet.

1. Find bag of pictures---puzzle pictures together to form a picture.

2. Get microscope and leaf out of container.

3. Place leaf under microscope. What do you see with and without microscope?

4. Draw and write what you see using your venn diagram sheet with and without microscope.

5. Put complete venn diagram in your interactive notebook.

6. Pull out sentence strips and pictures in the ziplock bags.

7. Match sentence with correct picture.

8. Place objects back in bag.

9. Put objects back in container and clean up.

**Academic Vocabulary**

Alike- object is the same

Different- not the same

Green (Plants are this color)

Plants (flower, leaf, plant, root, seed, shrub, sprout, stem)

Tool- instrument used to make really small objects look bigger by magnifying them.

* The #4 Vocabulary Card Sort will be used as a (FACT) Formative Assessment Classroom Technique for this activity. The student will use context clues from the vocabulary card sort to match up the sentence strips to the picture/word. This will help students to be able to see what each word means in picture form.

**Assessment**

Card Sorts- Vocabulary Match Up. Students will match the definition with the picture to get a better understanding of the vocabulary used in the lesson. This will also show what vocabulary they already know, what they learned, and what they don’t know yet.

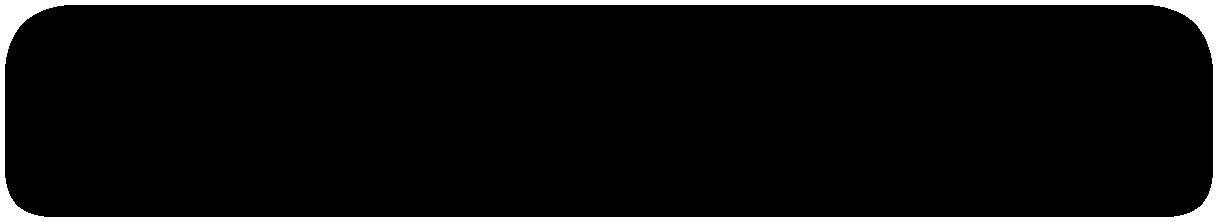
Students have a misconception thinking that the stem is not part of the plant.

**Clean-up** 

* Put the matching cards back together and in bag.
* Put the puzzle picture back in bag.
* Put leaf back in bag.
* Leave microscope by box for next group.
* Tape completed venn diagram in your interactive

notebook.

**Venn Diagram Handout**



www.ReadWriteThink.org

Venn Diagram, 2 Circles



Vocabulary Word Sort (sentence strips and pictures)

Alike- They are the same

Different- They are not alike

Green- Most plants is this color

Plants- Such as a flower, leaf, plant, root, seed, shrub, sprout, stem

Tool- instrument used to make really small objects look bigger by magnifying them.







